IN THE CLAIMS

Please cancel claims 31 - 33.

Please amend the following claims which are pending in the present application:

Listing of Claims:

1. (Previously presented) An apparatus comprising:

a printed circuit board (PCB) having a top surface and a bottom surface;

at least one electronic component, having a backside surface, mounted on the bottom surface of the PCB;

a bottom heat dissipating device, having a bottom coupling portion, attached to the bottom surface of the PCB, a top surface thereof thermally coupled to the backside surface of the electronic component; and

a top heat dissipating device, having a top coupling portion, attached to the top surface of the PCB, the top coupling portion contacting the bottom coupling portion, the bottom and top coupling portions jointly forming a thermally conductive coupling member being thermally coupled to the bottom and top heat dissipating devices at least one of the heat dissipating devices having recessed areas of different depths to thermally couple with electronic components of different heights.

2. (Original) The apparatus of claim 1, wherein the apparatus is a mezzanine card.

3. (Previously presented) The apparatus of claim 2, wherein the top and bottom heat dissipating devices are heat spreaders with lengths between 100 and 140 millimeters.

4. (Original) The apparatus of claim 3, wherein a height from a bottom surface of the bottom heat spreader to a top surface of the top heat spreader is 8.2 millimeters or less.

5. (Cancelled)

6. (Original) The apparatus of claim 3, wherein the one or more electronic components mounted on the bottom surface of the PCB comprise a processor.

7. (Original) The apparatus of claim 6, wherein the thermally conductive coupling member extends along an edge portion of the PCB, and the processor is mounted within 3 millimeters from said edge portion.

8. (Original) The apparatus of claim 1, wherein the thermally conductive coupling member comprises a top portion and a bottom portion, wherein the top portion is integral with the top heat dissipating device and/or the bottom portion is integral with the bottom heat dissipating device.

9. (Original) The apparatus of claim 1, further comprising at least one other thermally conductive coupling member thermally coupled with the bottom and top heat dissipating devices.

10. (Original) The apparatus of claim 1, wherein the bottom heat dissipating device and/or the top heat dissipating device are made substantially of copper or a copper alloy.

11. (Original) The apparatus of claim 1, wherein a bottom surface of the top heat dissipating device is thermally coupled with one or more electronic devices mounted on the top surface of the PCB.

12. (Original) The apparatus of claim 1, wherein the top and bottom heat dissipating devices are attached to the PCB with thermally conductive mounting hardware, said mounting hardware thermally coupled with the top and bottom heat dissipating devices.

13. (Original) The apparatus of claim 12, wherein the thermally conductive mounting hardware comprises one or more screws.

14. (Cancel)

15. (Previously presented) The apparatus of claim 1, wherein the thermally conductive coupling member extends partially adjacent to a side edge of the PCB between the top and bottom heat dissipating devices.

16. (Original) The apparatus of claim 15, wherein lengths of the top and bottom heat dissipating devices extending along the edge of the PCB are between 100 and 140 millimeters and a length of the thermally conductive coupling member extending along the edge is between 25 and 50 millimeters.

17. (Cancelled)

18. (Original) The apparatus of claim 1, wherein the thermally conductive coupling member extends along an edge of the PCB with at least one opening formed within the thermally conductive coupling member.

19. (Currently amended) A system comprising:

a carrier board having a bus; and

a mezzanine card mounted on the carrier board coupled with the bus, the mezzanine card comprising a printed circuit board (PCB), a bottom heat dissipating device attached to a bottom surface of the PCB facing the carrier board, a top surface of the bottom heat dissipating device thermally coupled with a backside surface of one or more electronic components mounted on the bottom surface of the PCB, a top heat dissipating device attached to a top surface of the PCB, and a thermally

conductive coupling member thermally coupled with the bottom and top heat dissipating device, the thermally conductive coupling member having a portion integral with at least one of the heat dissipating devices and being adjacent to the other heat dissipating device, the thermally conductive coupling member having a length being ~~at least 17~~ between 17 and 50 percent of a length of one of the heat dissipating devices.

20. (Original) The system of claim 19, wherein the top and bottom heat dissipating devices are heat spreaders having a length between 100 and 140 millimeters.

21. (Original) The system of claim 19, wherein a height from a top surface of the carrier board to a top surface of the top heat dissipating device is 13.5 millimeters or less.

22. (Cancelled)

23. (Original) The system of claim 19, wherein the bottom heat dissipating device and/or the top heat dissipating device have recessed areas of different depths to thermally couple with electronic components of different heights.

24. (Original) The system of claim 19, wherein the top and bottom heat dissipating devices are attached to the PCB with thermally conductive mounting hardware also used to mount the mezzanine card to the carrier board, said

mounting hardware thermally coupled with the top and bottom heat dissipating devices.

25. (Previously presented) The system of claim 19, wherein the thermally conductive coupling member extends partially adjacent to a side edge of the PCB between the top and bottom heat dissipating devices.

26. (Original) The system of claim 25, wherein lengths of the top and bottom heat dissipating devices extending along the edge of the PCB are between 100 and 140 millimeters and a length of the thermally conductive coupling member extending along the edge is between 25 and 50 millimeters.

27 - 30. (Cancelled)

31 - 33. (Cancelled)